AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application;

Claim 1 (Currently Amended). A method of processing an audio signal comprising the steps of:

receiving a plurality of M sound source signals, each of said M sound source signals having ~~source information~~ attributes including at least one of position information, movement information, and localization position information;

~~synthesizing~~ arranging said M sound source signals ~~to provide N sound source signals, said number N being smaller than said number M of said sound source signals, based on said source information of each of said M~~ in groups based on the attributes of the M sound source signals so as to form grouped sound source signals;

~~synthesizing said M source information to produce N source information corresponding to said N synthesized sound source signals, based on said source information of each of said M sound source signals; and~~

~~localizing said N synthesized sound source signals in sound image based on said N source information.~~

storing the grouped sound source signals;

providing control signals having one of position information and movement information;

reading out the stored grouped sound source signals; and

performing virtual localization processing on the read-out grouped sound source signals based on the control signals so as to produce left and right stereo signals.

Claim 2 (Currently Amended). The method of processing an audio signal according to claim 1, wherein said step of ~~localizing~~ performing virtual localization processing is a virtual sound image localization for obtaining ~~two-channel reproduced~~ the left and right stereo signals supplied to a pair of acoustic transducers to localize a sound image at an arbitrary position around a listener.

Claim 3 (Currently Amended). The method of processing an audio signal according to claim 1, wherein ~~said~~ at least one ~~position information, movement information and localization information~~ of said attributes of said M sound source signals ~~and/or said synthesized at least one information of position information, movement information and localization information corresponding to said N synthesized sound source signals~~ is changed by a change instruction.

Claim 4 (Previously Presented). The method of processing an audio signal according to claim 3, wherein said change instruction is supplied by a user's operation.

Claim 5 (Previously Presented). The method of processing an audio signal according to claim 3, wherein said change instruction is obtained by detecting a movement of a

listener's head.

Claim 6 (Currently Amended). The method of processing an audio signal according to claim 1, further comprising the step of supplying random fluctuations to at least one sound source signal of said M sound source signals and/or said ~~synthesized information corresponding to at least one of said N synthesized~~ grouped sound source signals.

Claim 7 (Currently Amended). The method of processing an audio signal according to claim 1, wherein ~~said~~ a number [[(N)]] of groups of said ~~synthesized~~ grouped sound source signals is two or greater, at least one of said ~~synthesized~~ grouped sound source signals is based on the attribute of localization information.

Claim 8 (Currently Amended). The method of processing an audio signal according to claim 1, further comprising the steps of changing a video signal in response to changes of reproducing localization positions of said M sound source signals or said ~~N synthesized~~ grouped sound source signals and outputting said video signals.

Claim 9 (Currently Amended). [[The]] A method of processing an audio signal comprising the steps of:

receiving a plurality of M sound source signals, each of said M sound source signals having ~~source information~~

attributes including at least one of position information, movement information, and localization position information;

~~synthesizing N sound source signals from~~

arranging said M sound source signals~~, where N is smaller than M, based on said source information of each of said M~~ in groups based on the attribute of the M sound source signals so as to form grouped sound source signals;

~~synthesizing said M source information to produce N source information corresponding to said N synthesized sound source signals based on said source information of each of said M sound source signals;~~

~~localizing said synthesized N sound source signals in virtual sound image based on said N source information;~~

~~storing a plurality of audio signals, localized in virtual sound image in memory means; and~~

~~reading and reproducing said audio signals from said memory means in response to said N source information of said synthesized N sound source signals.~~

storing the grouped sound source signals;

providing control signals having one of position information and movement information;

reading out the stored grouped sound source signals; and

performing virtual localization processing on the read-out grouped sound source signals based on the control information so as to produce left and right stereo signals.

Claim 10 (Currently Amended). The method of processing an audio signal according to claim 9, wherein at least one of

said ~~N source information of said synthesized N~~ attributes of said M sound source signals is changed by a change instruction.

Claim 11 (Previously Presented). The method of processing an audio signal according to claim 10, wherein said change instruction is supplied by a user's operation.

Claim 12 (Previously Presented). The method of processing an audio signal according to claim 10, wherein said change instruction is obtained by detecting a movement of a listener's head.

Claim 13 (Currently Amended). The method of processing an audio signal according to claim 9, further comprising the step of supplying random fluctuations to said ~~N source information of said audio signals read out from said memory means~~ grouped sound source signals.

Claim 14 (Currently Amended). The method of processing an audio signal according to claim 9, wherein ~~said~~ a number [[(N)]] of groups of said ~~synthesized~~ sound source signals is two or larger, at least one of said ~~synthesized~~ grouped sound source signals is based on the attribute of localization information.

Claim 15 (Currently Amended). An apparatus for processing an audio signal comprising:

means for receiving a plurality of M sound source signals, each of said sound source signals having ~~source information~~ attributes including at least one of position information, movement information, and localization position information;

means for ~~synthesizing~~ arranging said M sound source signals ~~to provide N sound source signals, said number N being smaller than said number M of said sound source signals, based on said source information of each of said M~~ in groups based on the attributes of the M sound source signals so as to form grouped sound source signals;

~~means for synthesizing said M source information to produce N source information corresponding to said N synthesized sound source signals based on said source information of each of said M sound source signals; and~~

~~signal processing means for localizing in sound image said synthesized N sound source signals based on said N source information.~~

a memory for storing the grouped sound source signal;

means for providing control signals having one of position information and movement information;

means for reading out from the memory the stored grouped sound source signals; and

a processor for performing virtual localization processing on the read-out grouped sound source signals based on the control signals so as to produce left and right stereo

signals.

Claim 16 (Currently Amended). The apparatus for processing an audio signal according to claim 15, wherein said ~~localizing in sound image~~ virtual localization processing in said ~~signal processing means~~ processor is a virtual sound image localization for obtaining ~~two-channel reproduced~~ the left and right stereo signals supplied to a pair of acoustic transducers to localize a sound image at an arbitrary position around a listener.

Claim 17 (Currently Amended). An apparatus for processing an audio signal comprising:

means for receiving a plurality of M sound source signals, each of said sound source signals having ~~source information~~ attributes including at least one of position information, movement information, and localization position information;

means for ~~generating synthesized~~ arranging said M sound source signals ~~by synthesizing N sound source signals from said M sound source signals, where N is smaller than M,~~ in groups based on ~~said source information of each of said M~~ the attributes of the M sound source signals so as to form grouped sound source signals;

~~means for synthesizing said M source information to produce N source information corresponding to said N~~

~~synthesized sound source signals based on said source information of each of said M sound source signals;~~

~~signal processing means for providing a plurality of sets of reproduced audio signals by localizing said synthesized N sound source signals in virtual sound image based on said N source information;~~

memory means for storing said ~~plurality of sets of reproduced audio signals obtained by said signal processing means~~ grouped sound source signals; [[and]]

reproducing means for reading ~~and reproducing one of said plurality of sets of reproduced audio signal from said memory means in response to said N source information of said synthesized N~~ out said grouped sound source signals[[.]];

means for providing control signals having one of position information and movement information; and

a signal processor for performing virtual localization processing on the read-out grouped sound source signals based on the control signals so as to produce left and right stereo signals.

Claim 18 (Currently Amended). The apparatus for processing an audio signal according to claim 17, wherein said ~~localizing in said signal~~ localization processing ~~means~~ of said signal processor is a virtual sound image localization for obtaining ~~two-channel reproduced~~ the left and right stereo signals supplied to a pair of acoustic transducers to localize a sound image at an arbitrary position around a listener.

Claims 19-23 (Canceled).